

Remarks

Double Patenting

Claims 1-21 are rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-13 and 22-35 of US 6,703,338. The Applicant submitted a Terminal Disclaimer in the previous response of November 11, 2004, a copy of which is attached.

Claims 1-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-20 of US 6,841,504. The Applicant submitted a Terminal Disclaimer in the previous response of November 11, 2004, a copy of which is attached.

The Applicant requests that these rejections be withdrawn.

Section 112 Rejections, first paragraph

Claims 1 through 21 were rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. The Applicant traverses this rejection.

Applicant amends Claims 1, 13 and 17 such that the “one or more polymerization catalysts” are defined by the group in Claims 7 and 16. Claims 7 and 16 are herein cancelled without prejudice.

The **MPEP** at 2164.3 states that “The scope of the required enablement varies inversely with the degree of predictability involved, but even in unpredictable arts, a disclosure of every operable species is not required.” While the **MPEP** goes on to state that “In cases involving unpredictable factors, such as most chemical reactions and physiological activity, more may be required”, the Applicant believes that the amended claims are enabled. It is known that these catalysts are all “single site” catalysts. Further, it is known that the catalysts being claimed are all activated by the same type of

activators such as aluminoxanes and other similar activators. Further, it is known that most single-site catalysts react with polyolefin monomers similarly in that they all produced polyolefins of relatively narrow molecular weight distribution. Thus, it would be expected that most all single-site catalysts would act within a predictable genus.

The Applicant thus requests that this rejection be withdrawn.

Section 112 Rejections, second paragraph

Claims 1 through 21 were rejected under 35 U.S.C. § 112, second paragraph as indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Applicant traverses this rejection.

Claim 15 is amended to correct the term "alkyls" to -alkyl-.

The Applicant requests that these rejections be withdrawn.

Section 103 Rejections

Claims 1 through 21 were rejected under 35 U.S.C. § 103(a) as obvious over *Resconi* as cited above. The Applicant traverses, as *Resconi* lacks disclosure of "alkyl substituted Group 13 atom-containing compounds", as admitted by the Examiner.

The **MPEP** at 2142 states that the Examiner has the initial burden of establishing a *prima facie* case of obviousness, that is, the "three basic criteria". One criteria is that "the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination must be found in the prior art and not based on applicant's disclosure." The Examiner has not established this element. The Applicant does not agree with the Examiner's statement that "one of ordinary skill in the art would have considered alkyl and aryl groups to be interchangeable in such compounds".

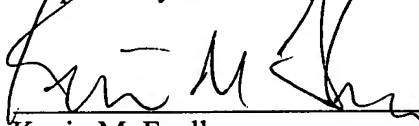
It is well known, for example, that boron-alkyl compounds do not activate single site catalysts as do boron-aryl activators. See, for example, in *Metallocene-based Polyolefins* at pages 8-9, wherein even replacing one $-(C_6F_5)$ with $-(CH_2)$ on the $B(C_6F_5)_3$ activator weakens it such as it does not activate, or only weakly activates. Further, the overwhelming evidence known to those skilled in the art is that very strong Lewis acids are necessary to activate single-site catalysts, such as disclosed by *Chen and Marks* (100(4) CHEM. REV. 1391-1434 (2000)). Those skilled in the art know that boron-alkyls are not strong Lewis acids, as alkyl groups are not as electron-withdrawing as are aryls and fluoro-aryls. (see the Supplemental IDS). Thus, a *prima facie* case of obviousness cannot be made.

Applicant requests that this rejection be withdrawn.

It is submitted that the case is in condition for allowance. The Applicant invites the Examiner to telephone the undersigned attorney if there are any other issues outstanding which have not been presented to the Examiner's satisfaction.

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Date

Respectfully submitted,



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